<u>Abstract</u>

The present invention provides a hot melt conductor paste composition that includes conductive particles and glass particles dispersed in a thermoplastic polymer system. The hot melt conductor paste composition according to the invention is a solid at room temperature, but melts at a temperature of from about 35°C to about 90°C to form a flowable liquid that can be applied to a silicon substrate by screen printing. The hot melt conductor paste composition is particularly suitable for use in the fabrication of photovoltaic cells.